

SAWFLIES FROM THE MARITIME PROVINCE OF SIBERIA

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The following paper is a report on the sawflies collected in the Maritime Province of Siberia by Prof. T. D. A. Cockereil and his associates in the summer of 1923. The collection contained 31 species, 28 of which are named specifically. Eleven species and one variety are described as new.

Most of the new species show a very close affinity to European forms, and of the previously described species nine were originally described from Europe. Three of the European species are here recorded from Siberia for the first time. One of the species had previously been known only from Japan; three of them were known only from China, and one was known only from Formosa. Judging from the sawflies alone we may say that the fauna of this maritime province is essentially Palaearctic but with a slight southern infusion.

MEGALODONTES (RHIPIDIOCEROS) SIBERIENSIS, new species

This species seems to be most closely related to *flabellicornis* where it runs in Konow's key, but the head and thorax have fewer pale marks, the femora are dark, etc.

Female.—Length, 10 mm. First joint of the flagellum subequal with the three following and nearly as long as the two apical joints; the flabellation of the third joint as long as the three following joints; the flabellations of joints 3, 4, 5, 6, 7, and 8 are subequal; pedicellum about half the length of the third joint; clypeus convex medianly, the anterior margin truncate; antennal foveae sharply defined, large, pointed above; postocellar area completely defined, broader posteriorly, its length subequal with its greatest width; postocellar line less than half as long as the ocellocular line; head coarsely, closely punctuate except on the posterior orbits, where the punctures are distinct and separated by a distance fully twice their diameter; prescutum with large, close punctures posteriorly, anteriorly the punctures well separated; scutum and scutellum irregularly punctuate, the punctures sometimes confluent; nervulus slightly post-

furcal; first abscissa of radius slightly shorter than second. Black; an indistinct spot on the clypeus medianly, the supraclypeal area, a narrow line along the posterior orbits extending obliquely across the vertex to the occiput, the narrow, posterior margin of the pronotum, the apical margins of tergites 4 to 9, inclusive (slightly interrupted medianly on sixth), and two obscure spots on the sides of the third tergite, bright-yellow; tibiae and tarsi rufo-ferruginous; wings brownish hyaline, the anterior portion of the front wings darker; venation dark-brown; costa and stigma pale-brown; head and thorax clothed with long, black hair.

The paratype females have an oblique spot on the posterior dorsal part of the scutum and in one of them the lateral spot on the third tergite is wanting.

Male.—Length, 10 mm. The male differs from the above description of the female in color as follows: Mandibles, except apices, the entire clypeus, scape beneath, a large spot on the side of the pronotum, proepisternum, anterior margin of mesepisternum, tegulae, all of the sternites and an obscure spot on the side of the second tergite, yellow. The apices of the four anterior femora and most of the posterior femora are testaceous.

Type-locality.—Okeanskaja, Siberia.

Paratype-locality.—Kongaus, Siberia.

Described from one female from the type locality collected August 15, 1923, by T. D. A. Cockerell, from two females and one male (allotype) from the paratype locality collected August, 1923, by T. D. A. Cockerell.

Type, allotype, and paratypes.—Cat. No. 27613, U.S.N.M.

The two paratype females and the allotype male lack the antennae beyond the scape.

TRICHIOSOMA SERICEA Konow

One female from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell.

ARGE, species

A single male from Kudia River, Amagu, Siberia, collected in July, 1923, by T. D. A. Cockerell does not seem to be described. It is related to *cyaneocrocera* and may be the male of *kongauensis* but at present can not be definitely associated.

ARGE CINGULATA Jakowlew

One female, which lacks the flagellum, from Kongaus, Siberia, collected August, 1923, by T. D. A. Cockerell. This specimen agrees well with both Jakowlew's and Konow's descriptions of this species.

ARGE METALLICA (Klug)

Two females from Kongaus, Siberia, collected August, 1923. One collected by T. D. A. Cockerell, the other by A. I. Lavrushin. These agree very well with Konow's redescription of the species. The specimen collected by Cockerell has the flagellum ferruginous while the specimen collected by Lavrushin has the flagellum black.

ARGE KONGAUENSIS, new species

Related to *melanochroa* (Gemlin) and *cyaneocrocera* (Forster) but is more robust and the head is distinctly expanded behind the eyes.

Female.—Length, 8.5 mm. Anterior margin of the clypeus with a broad, quadrate emargination, the lobes narrowed and broadly rounded; supraclypeal area carinated; antennal foveae very deep and continuous with the supraclypeal foveae; frontal fovea very sharply defined, acutely angled ventrally with a well-defined pit opposite the level of the antennae and with an indistinct transverse ridge ventrad of the pit, the fovea not extending dorsally to the level of the anterior ocellus; postocellar furrow obsolete; basal vein and cubitus interstitial on the subcosta; stigma angulate basally, tapering to an acute apex; third intercubitus gently curved so the third cubital cell is slightly longer on radius; the nervulus in the middle of the cell. Metallic green; palpi ferruginous; tergites 2 to 4 and most of the sternites obscurely ferruginous; legs black; anterior femur beneath and all of the tibiae and tarsi luteous; wings yellowish, hyaline, with a distinct infusate cloud below the stigma; venation dark brown; costa and anterior half of subcosta yellow; head and thorax clothed with sparse gray hair.

Type-locality.—Kongaus, Siberia.

Described from a single female collected August, 1923, by T. D. A. Cockerell.

Type.—Cat. No. 27614, U.S.N.M.

ARGE NYEMITAWA, new species

This species runs to *berberidis* (Klug) in Konow's key but the flagellum is more robust and the head is expanded behind the eyes. Besides the noncompressed flagellum this new species may be separated from certain species from eastern Asia as follows: From *verticosa* Konow by the position of the nervulus; from *accliviceps* Konow by head characters; from *carinicornis* Konow, *similis* Vollenhoven and *compar* Konow, by the short flagellum.

Female.—Length, 10 mm. The anterior margin of the clypeus very slightly arcuately emarginate; supraclypeal area broadly convex without a median carina; antennal and supraclypeal foveae

separated; frontal fovea broad, shallow, poorly defined ventrally well defined dorsally and extending above the anterior ocellus; immediately below the anterior ocellus is a broad, shallow, depressed area; postocellar furrow present; postocellar area fully twice as broad as long; head distinctly expanded behind the eyes; flagellum not compressed, shorter than the thorax and distinctly thickening apically; basal vein and cubitus joining the subcosta at the same place; third intercubitus strongly curved so the third cubital cell is one-fifth shorter on the cubitus; nervulus distinctly beyond the middle. Bright, metallic blue; tarsi and flagellum black; wings dark brown with a strong violaceous reflection posteriorly, becoming paler apically; venation, including costa and stigma, black; head and thorax clothed with short, black hair.

Type-locality.—Okeanskaja, Siberia.

Described from a single female collected by T. D. A. Cockerell in August, 1923.

Type.—Cat. No. 27615, U.S.N.M.

ARGE PAGANIFORMIS, new species

Closely allied to *pagana* (Panzer) and *geei* Rohwer. Can readily be distinguished from both of these species by the truncate, anterior margin of the clypeus.

Female.—Length, 6.5 mm. Anterior margin of the clypeus truncate, supraclypeal area strongly convex but not carinate; frontal fovea broader and deeper between the bases of the antennae, very slightly expanded just below the anterior ocellus; postocellar area very indistinctly defined; head distinctly expanded behind the eyes; flagellum cylindrical, subequal in length with the thorax; basal vein joining the subcosta slightly before the origin of the cubitus; third intercubitus strongly curved; third abscissa of radius one-fifth longer than the posterior margin of the third cubital cell; nervulus received at the middle of cell. Metallic blue; abdomen beyond the first segment ferruginous; legs metallic except the black tibiae and tarsi; wings dark brown with a slight violaceous reflection; venation, including costa and stigma, black.

Type-locality.—Okeanskaja, Siberia.

Described from a single female collected August 5, 1923, by T. D. A. Cockerell.

Type.—Cat. No. 27616, U.S.N.M.

ALLANTUS (EMPHYTUS) BASALIS (Klug)

Tenthredo (*Emphytus*) *basalis* KLUG, Magaz. Ges. Naturf. Fr. Berlin, vol. 8, 1814, p. 282.

Allantus cinctus nigritibialis ROHWER, Proc. U. S. Nat. Mus., vol. 41, no. 1866, 1911, p. 497.

A single female from Kongaus, Siberia, collected in August, 1923, by T. D. A. Cockerell. This agrees well with Enslin's redescription and there seems to be no reason to doubt the above synonymy.

AMETASTEGIA GLABRATA (Fallén)

Two females from Vladivostok collected July 31, 1923, by T. D. A. Cockerell; and one female from Okeanskaja, Siberia, collected August, 1923, by T. D. A. Cockerell.

DOLERUS OKEANSKAJENSIS, new species

In general appearance and color very closely resembles the Nearctic species *similis* Norton and allies but differs from all of these in details of the sculpture of the head and thorax and in the shape of the sheath. From *variegatus* Jakowlew it may be separated by the pale lobes of the scutum, from *armillatus* Konow the pale tegulae and broader rufous band on the abdomen will distinguish it.

Female.—Length, 9 mm. Clypeus with a rather narrow, deep, subarcuate emargination, the lobes broad, truncate, the surface covered with coarse, contiguous punctures; frons coarsely punctured; antennal furrows shallow; posterior orbits and sides of vertex shining but with separate distinct punctures; postocellar furrow faintly indicated; postocellar area with elongate, contiguous punctures; prescutum with well-defined, rather large, close punctures (punctures rather closer medianly); scutum laterally punctured like the prescutum but medianly with the punctures closer and smaller; scutellum with close, large, uniform punctures; postnotum (scutellar appendage) longitudinally aciculate on an opaque surface, without a distinct median ridge; mesepisternum punctato-reticulate, mesosternum shining with scattered, rather small, but well-defined punctures; sheath broad, acute apically, tapering below; antenna shorter than the head and thorax; the median joints of the flagellum compressed, the first joint distinctly longer than the second which is subequal with the third; tergites polished. Black; pronotum, prescutum, scutum (except immediately in front of the scutellum), tegulae, abdominal segments two to five, inclusive, rufous; legs, black; the under side of the anterior femora, the anterior tibiae, the intermediate tibiae obscurely beneath, rufous. Body, densely clothed with long gray hair. Wings hyaline; venation black.

Male.—Length 9 mm. Head sculptured like the female except the vertex is more closely punctured posteriorly the sides of the prescutum have the punctures more widely separated. Black; anterior femora beneath at the apex, the entire anterior tibiae, rufous. More densely clothed with white hair than the female.

The paratype male has the base of the intermediate tibiae obscurely rufous, and the posterior tarsi are brownish.

Type-locality.—Okeanskaja, Siberia.

Described from one female (type) and two males (one allotype), collected August, 1923, by T. D. A. Cockerell. The type and allotype were collected August 5th.

Type, allotype, and paratype.—Cat. No. 27617, U.S.N.M.

RHOGOGASTER KUDIANUS, new species

This species seems to be intermediate between *R. viridis* (Linnaeus) and *R. dissimulans* (Kincaid). In general color it is much like Kincaid's species, but it differs from it in the more deeply emarginate clypeus and the dark markings at the apices of the tarsi. It may readily be separated from *viridis* by the complete absence of black on the abdomen, a slight difference in the shape of the sheath and shorter antennae.

Female.—Length, 9.5 mm. Labrum broad, the apical margin almost truncate, anterior margin of the clypeus with a deep, subquadrate emargination, the lobes broad and truncate; head without punctures; postocellar furrow straight; postocellar area more than two times as broad as long; occipital carina sharply defined; antenna slender, a little longer than the head and thorax, the third joint subequal with the fourth and fifth; thorax smooth; second intercubitus sinuate; fourth abscissa of cubitus one-third as long as the third; sheath stout, strongly convex below, the apex narrowly rounded. Uniformly pale-yellow (green in life); flagellum, except the two basal joints beneath, scape and pedicellum above, a U-shaped mark on the frons, the small spot inclosing the anterior ocellus, suture of prescutum, sides and depressed area of scutum, black; legs color of the body; apices of the four anterior femora above, the posterior femora with a complete narrow line above, narrow lines on all tibiae above, apices of all tarsi, black; wings clear hyaline, strongly iridescent; venation yellow; costa, basal, median, discoidal and anal veins, black.

Type-locality.—Kudia River, Amagu, Siberia.

Described from a single female collected July, 1923, by T. D. A. Cockerell.

Type.—Cat. No. 27618, U.S.N.M.

SIOLLA RUFICORNIS (Cameron)

One female from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell.

This specimen agrees with Cameron's and Kirby's descriptions, except the hind femora are entirely black.

PACHYROTASIS ANTENNATA (Klug)

A single female from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell.

In this specimen the upper part of the mesepisternum is narrowly black; the prescutum is margined with yellow only posteriorly; the hind tibiae are black except for a small spot exteriorly.

MACROPHYA APICALIS, variety INFUMATA, new variety

Female.—Length, 9 mm. Differs from the typical form which occurs in Japan by having the hind trochanters black and in having the wings distinctly infumated. Apex of stigma and the costa piceous.

Paratype females are 11 and 12 mm. in length.

Male.—Length, 9 mm. Differs from the female in having the scutellum and hind coxae all black (without white markings).

Type-locality.—Kudia River, Amagu, Siberia.

Paratype-locality.—Kongaus, Siberia.

Described from one female (type) and one male (allotype) from the type-locality collected by T. D. A. Cockerell July, 1923; and from two females from the paratype-locality collected by T. D. A. Cockerell August, 1923.

Type, allotype, and paratypes.—Cat. No. 28478, U.S.N.M.

TENTHREDO FUSCOCOSTALIS, new species

This species is closely allied to *Tenthredo vespa* (Retzius) but may be separated from it by the much blacker legs, the presence of small yellow spots on the scutellum, and the greatly reduced yellow markings on the abdomen. The tegulae in the new species are almost entirely black.

Female.—Length, 11 mm. Labrum smooth, broadly rounded apically; clypeus smooth with a deep, broad, arcuate emargination, the lobes narrowly rounded apically; frons with distinct, coarse punctures which medianly tend to become confluent so as to give a slightly wrinkled appearance; posterior orbits with very small punctures; head not narrowing behind the eyes; postocellar area sharply defined laterally, feebly defined anteriorly, about twice as broad as long; occiput distinctly margined; antenna distinctly thickened apically, the seventh and eighth joints one-fourth broader than long; mesonotum with coarse, distinct punctures which are somewhat closer medianly; scutellum transversely convex, not as coarsely punctured as the scutum; mesepisternum coarsely punctato-reticulate; first tergite smooth, the following tergites with small, distinct punctures on a granular surface, the punctures larger on the anterior tergites; stigma truncate apically; fifth abscissa of the

cubitus one-third shorter than the fourth abscissa; sheath straight above, rounded apically, convex below. Black; clypeus (except margin), scape, metaepisternum, narrow margin of the first, fourth, and fifth tergites, a median spot on the seventh, eighth, and ninth tergites, two spots on scutellum, small anterior spot on tegulae, yellow; legs black, apices of the anterior femora beneath, the four anterior tibiae beneath, and posterior tibiae (except apices), yellow; wings subhyaline, radial, anterior margin of cubital and apical part of first discoidal cells, brownish; venation black, costa and stigma, reddish yellow; thorax with short, gray hair.

Type-locality.—Kongaus, Siberia.

Described from a single female collected August, 1923, by T. D. A. Cockerell.

Type.—Cat. No. 27619, U.S.N.M.

TENTHREDO KONGAUANA, new species

This species seems to be allied to *Tenthredo ornatus* (E. André) but differs from the description of that species in the absence of many black markings. From Enslin's redescription of *Tenthredella microps* (Konow) it differs in the absence of black spots on the clypeus, the absence of a black line on the anterior legs, and the more strongly convex scutellum.

Female.—Length, 11 mm. Anterior margin of the labrum broadly rounded anteriorly; the clypeus with a broad, deep, arcuate emargination and narrow, obtuse lobes; head shining, practically without sculpture; antennal furrows complete; no flange above the bases of the antennae; postocellar furrow straight, well defined; postocellar area narrowing anteriorly; third antennal joint nearly as long as the two following; the flagellum short, of uniform width; occipital carina feeble; mesoscutum and prescutum with small, well-separated punctures; scutellum smooth, strongly convex but hardly pyramidal; mesepisternum very finely tessellated, the median tubercle prominent; fourth abscissa of cubitus subequal with the second intercubitus; interradius strongly curved apically; third intercubitus about five times as long as the second; sheath broadly rounded apically, convex above and below. Pale-yellow (perhaps green in life); pedicel, flagellum, a large spot on frons including the ocelli and W-shaped dorsally, spots on lateral lobes, a large spot on the prescutum, black; the second, third, and fourth tergites brownish medianly; legs the color of the body; the apices of the hind femora dorsally, the dorsal part of the posterior tibiae and all of the posterior tarsi, black; wings hyaline; venation dark brown; costa and stigma pale yellow. Body without long hair.

Type-locality.—Kongaus, Siberia.

Described from two females (one type) collected in August, 1923. The type collected by T. D. A. Cockerell, the paratype by A. I. Lavrushin.

Type and paratype.—Cat. No. 27620, U.S.N.M.

TENTHREDO KUDIANA, new species

This species differs from *Tenthredo andreas* (Jakowlew) by the yellow margins of the pronotum and tegulae, from *T. sublimus* (Konow) by the dark stigma, from *T. kohli* (Konow) by the different markings of the head and black prescutum. Superficially, the species seems to be allied to *T. bernardi* (Konow), but it differs from Konow's description in having the face and frons black.

Female.—Length, 9 mm. Anterior margin of the clypeus broadly, subquadrately emarginate; head with distinct, although fine, irregular, striato-punctations; the orbits not receding, shining; occiput feebly margined, third antennal joint nearly one-half longer than the fourth; scutum and prescutum opaque with close, well-defined punctures, scutellum gently convex not pyramidal, interradius strongly curved, received a little before the apical third; fourth abscissa of cubitus a little less than one-half shorter than the third; tergites finely, transversely aciculate; sheath straight above, rounded apically and gently convex below. Black; base of mandibles, labrum, clypeus, obscure spot on supraclypeal area, malar space, lower half of posterior orbits, most of the pronotum, tegulae, oblique spots on scutum posteriorly, most of the scutellum, scutellar appendage, sides and venter of thorax (except an oblique line on mesepisternum), sternites, tergites laterally, narrow apical margin of first and fourth tergites, tenth tergite and most of the sheath, pale yellow (perhaps with a greenish tinge in life); legs pale yellow, anterior legs, intermediate femora and tibiae, posterior femora above, intermediate tarsi and posterior tibia and tarsi, black; head and thorax with short white hair; wings hyaline, venation (including costa and stigma) black.

Type-locality.—Kudia River, Amagu, Siberia.

Described from one female collected by T. D. A. Cockerell, July, 1923.

Type.—Cat. No. 27621, U.S.N.M.

TENTHREDELLA, species

A single female from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell lacks antennae. This species looks much like some of the Nearctic species but differs in details of color. It does not seem to be any of the species listed in Enslin's revision of the Palaearctic forms.

TENTHREDELLA FAGI (Panzer)

A female from Kudia River, Siberia, collected July, 1923, by T. D. A. Cockerell, runs to this species in Enslin's key and agrees with specimens determined by Enslin.

TENTHREDELLA FULVA (Klug)

One female from Kudia River, Amagu, Siberia, collected August, 1923, by T. D. A. Cockerell, agrees well with Enslin's redescription of this species.

TENTHREDELLA FUSCOTERMINATA (Marlatt)

Two females from Kongaus, Siberia, collected August, 1923, by T. D. A. Cockerell, agree with the types.

Enslin considers this to be a synonym of *xanthotarsis* (Cameron), but judging from the original description by Cameron and the redescription by Kirby the two forms may be separated by the following characters:

Head below the antennae punctured; pectus with a black spot; hind femora with a black line.....	<i>xanthotarsis</i> (Cameron).
Head below the antennae not punctured; pectus and hind femora without black.....	<i>fuscotermiata</i> (Marlatt).

TENTHREDELLA LIVIDA, variety DUBIA (Ström)

A female from Olga, Siberia, collected July 13, 1923, by T. D. A. Cockerell agrees with European specimens determined by Enslin.

TENTHREDELLA MESOMELAS (Linnaeus)

A single female from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell agrees with a European specimen determined by R. Meyer, but the venter is darker than in other European specimens. The venter is distinctly brownish. A single male from same locality has the marking on the tergites narrower and front legs without black.

TENTHREDELLA COCKERELLI, new species

This species is allied to *goliath* (Enslin) but differs from the description of that species in the absence of pale marks at the bases of the antennae, in the infusate apices of the wings, and black sternites.

Female.—Length, 14 mm. Head broad, the posterior orbits distinctly wider than the cephal-caudad diameter of the eye; anterior margin of the labrum subacute; the clypeus with a rather shallow, arcuate emargination; supraclypeal area convex; frontal furrows deep; postocellar area completely defined by deep furrows, posterior

width a little greater than its length; head shining without distinct punctures; occiput strongly margined; third antennal joint about one-fourth longer than the fourth; scutum and prescutum shining but with small, distinct punctures; scutellum strongly, transversely convex; interradius strongly curved, received by the third cubital cell at apical third; third and fourth abscissa of the cubitus subequal; sheath rounded apically, convex below. Black; base of mandibles, labrum, two spots on the clypeus, an L-shaped mark from superior orbit to occiput (broader at occiput), the dorsal angles of pronotum, tegulae, spot on the scutellum, spot on metepisternum, sides of the basal plates, white; legs black, posterior trochanters, all tibiae and tarsi, except apices, white; wings hyaline, distinctly infumated around apex of the stigma; venation black; costa and stigma reddish-yellow.

Type-locality.—Kongaus, Siberia.

Described from a single female collected by T. D. A. Cockerell, August, 1923.

Type.—Cat. No. 27622, U.S.N.M.

SELANDRIA TEMPORALIS Thomson

One female from Kudia River, Amagu, Siberia, collected July, 1923, by W. P. Cockerell.

STROMBOCEROS DELICATULUS (Fallén)

One male from Kudia River, Amagu, Siberia, collected July, 1923, by T. D. A. Cockerell.

BUSARBIDEA FORMOSANA Rohwer

A single male from Okeanskaja, Siberia, collected August, 1923, by T. D. A. Cockerell.

This male agrees very closely with a paratype female and appears to be the undescribed male of this species.

PONTANIA, species

Two males from Okeanskaja, Siberia, collected August, 1923, by T. D. A. Cockerell.

PTERONIDEA NIGRICORNIS, variety SIBIRICA Jakowlew

One female from Okeanskaja, Siberia, collected August, 1923, by T. D. A. Cockerell.

PRISTOPHORA CHROMATA, new species

This species is very unusual in color for a species of the genus *Pristophora*. Judging from Enslin's key to the European species it is allied to *pallidula* Konow, but it differs from the description

of that species in the absence of black marks on the head and thorax and in the pale stigma.

Female.—Length, 6 mm. Apical margin of the labrum broadly rounded; clypeus with the lateral angles broadly rounded; supra-clypeal area gently convexed, triangular in outline; supra-clypeal foveae confluent with the antennal foveae; frontal foveae elongate; frontal crest prominent, unbroken; postocellar line a trifle shorter than the ocellocular line; postocellar furrow wanting; postocellar area with a distinct longitudinal, median furrow; vertical furrows complete, well defined; head slightly narrowing behind the eyes; antenna nearly as long as the body, the third joint a trifle shorter than the fourth; thorax shining, basal plates finely reticulate; tergites smooth; stigma angulate basally, gradually tapering to an acute apex; second recurrent antefurcal by a distance nearly equal to the length of the second intercubitus; recurrentella antefurcal by half the length of intercubitella; sheath broad, straight above, narrowly rounded at apex, rounding to a broad base; claws with a prominent inner tooth. Uniformly pale-yellow (perhaps green in life); head, spot on prescutum, elongate spots on scutum, with a distinct ferruginous tinge; antennae with a narrow black line above; wings hyaline, strongly iridescent; venation dark-brown; costa, subcosta and stigma sordid-white.

Type-locality.—Kudia River, Amagu, Siberia.

Described from a single female collected July, 1923, by T. D. A. Cockerell.

Type.—Cat. No. 27623, U.S.N.M.

